## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier
- **Product form**: Mixture
- **Product name**: LL Sour- 7415, 74115, 74155
- **Product code**: 00128

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

### 1.3. Details of the supplier of the safety data sheet
- Advantage Chemical, LLC
  - Temecula, CA, 92590
  - T 1-855-238-2436

### 1.4. Emergency telephone number
- **Emergency number**: 1-800-424-9300
  - ChemTrec

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture
- **GHS-US classification**
  - Skin Corr. 1C: H314
  - Full text of H-statements: see section 16

### 2.2. Label elements
- **GHS-US labelling**
  - **Hazard pictograms (GHS-US)**: GHS05
  - **Signal word (GHS-US)**: Danger
  - **Hazard statements (GHS-US)**: H314 - Causes severe skin burns and eye damage
  - **Precautionary statements (GHS-US)**:
    - P260 - Do not breathe dust/fume/gas/mist/vapours/spray
    - P264 - Wash hands, forearms and face thoroughly after handling
    - P280 - Wear protective gloves/protective clothing/eye protection/face protection
    - P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
    - P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
    - P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
    - P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
    - P363 - Wash contaminated clothing before reuse
    - P405 - Store locked up
    - P501 - Dispose of contents/container to a licensed hazardous waste facility in accordance with state and local agencies

### 2.3. Other hazards
- No additional information available

### 2.4. Unknown acute toxicity (GHS-US)
- Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance
- Not applicable

### 3.2. Mixture
Name: hexafluorosilicic acid, conc=25%, aqueous solution
CAS No: 16961-83-4

GHS-US classification: Not classified

%: 25 - 50

PPE: Not required

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Allow breathing of fresh air. Allow the victim to rest.
First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion: Rinse mouth. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in original container in a cool well ventilated area. Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.
Storage temperature: >= 25 (5 - 42) °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>LL Sour- 7415, 74115, 74155</th>
<th>ACGIH</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4)

<table>
<thead>
<tr>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH TWA (mg/m³)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>2.5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Green</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>&gt;= 1 (0.5 - 2)</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt;= 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt;= 100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>None</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>&gt;= 1.072 (1.065 - 1.085) g/ml</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Water: Solubility in water of component(s) of the mixture:</td>
<td></td>
</tr>
<tr>
<td>hexafluorosilicic acid, conc=25%, aqueous solution:</td>
<td>Complete</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

VOC content: <= 10 g/l
## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available.

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products


---

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns and eye damage. pH: &gt;= 1 (0.5 - 2)</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potential adverse human health effects and symptoms</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

### hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4)

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
</tr>
</tbody>
</table>

### hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4) - Toxicity

<table>
<thead>
<tr>
<th>Method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>&gt; 10 mg/l (96 h; Brachydanio rerio)</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>10 mg/l (96 h; Scenedesmus quadricauda; Cell numbers)</td>
</tr>
</tbody>
</table>

### hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4) - Persistence and degradability

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL Sour- 7415, 74115, 74155</td>
<td>Persistence and degradability: Not established.</td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
LL Sour- 7415, 74115, 74155
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD (% of THOD)</td>
</tr>
<tr>
<td>Not applicable</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

LL Sour- 7415, 74115, 74155
Bioaccumulative potential
Not established.

hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4)
Bioaccumulative potential
Not bioaccumulative.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose of contents/containers in hazardous or special waste collection point, an approved disposal plant, a licensed hazardous waste disposal contractor or authorized waste collection site in accordance with local, regional and/or international regulation, except for empty clean containers which can be disposed of as non hazardous waste.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description: UN1760 Corrosive liquids, n.o.s. (Contains Hexafluorosilicate), 8, III

UN-No.(DOT): UN1760
Proper Shipping Name (DOT): Corrosive liquids, n.o.s.
Contains Hexafluorosilicate

Transport hazard class(es) (DOT): 8 - Class 8 - Corrosive material 49 CFR 173.136
Hazard labels (DOT): 8 - Corrosive

Packing group (DOT): III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx): 203

DOT Packaging Bulk (49 CFR 173.xxx): 241

DOT Symbols: G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102): IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx): 154
LL Sour- 7415, 74115, 74155
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Quantity Limitations
- Passenger aircraft/rail (49 CFR 173.27): 5 L
- Cargo aircraft only (49 CFR 175.75): 60 L

DOT Vessel Stowage
- Location: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
- Other: 40 - Stow "clear of living quarters"

Additional information
- Other information: Less than 32 ounces ORMD, greater than 32 ounces UN1760.

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
- hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4)
  Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
- CANADA
  No additional information available

- EU-Regulations
  No additional information available

- Classification according to Regulation (EC) No. 1272/2008 [CLP]
  No additional information available

- Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
  Not classified

- National regulations
  No additional information available

15.3. US State regulations
- hexafluorosilicic acid, conc=25%, aqueous solution (16961-83-4)
  U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date: 02/02/2016
Other information: None.

Full text of H-statements:

<table>
<thead>
<tr>
<th>H314</th>
<th>Skin corrosion/irritation, Category 1C</th>
</tr>
</thead>
<tbody>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
</tbody>
</table>

NFPA health hazard: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard: 0 - Materials that will not burn.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

NFPA specific hazard: None
**LL Sour- 7415, 74115, 74155**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>HMIS III Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given</td>
</tr>
<tr>
<td>Flammability</td>
<td>0 Minimal Hazard - Materials that will not burn</td>
</tr>
<tr>
<td>Physical</td>
<td>0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>C - Safety glasses, Gloves, Synthetic apron</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*